

## ABSTRACT OF THE DISCLOSURE

The invention relates to a method of regulating or controlling a cyclically (20; 30) operating internal combustion engine (1) using a computation model by which the cycle (20; 30) or portions of the cycle (20; 30) of the internal combustion engine (1) is, or are, divided into individual parts (21 through 28; 31 through 38) and the operating condition within each cycle part (21 through 28; 31 through 38) is determined using measured values, stored and/or applied data in order to obtain actuating variables for operating said internal combustion engine. The computation models for the various individual cycle parts (21 through 28; 31 through 38) are based on at least partially different assumptions and/or have different simplifications. The time limits of the cycle parts (21 through 28; 31 through 38) are at least partially calculated as a function of at least one variable engine operating parameter. The operating status of an internal combustion engine can thus be determined readily and quickly while still with sufficient accuracy so as to obtain actuating variables suited for regulating or controlling the internal combustion engine (1) using electronic control units available for series operation.

Fig. 2